

### Listing of the Claims

1. (currently amended) An empty capsid of the infectious bursal disease virus (IBDV), ~~VLP( VP4)~~, characterized in that it is constituted by assembly of only consisting of a plurality of IBDV pVP2 proteins and IBDV VP3 proteins.
2. (currently amended) A nucleic acid comprising characterized in that its nucleotide sequence is constituted by (i) a nucleotide sequence comprising an the open reading frame encoding an corresponding to the IBDV pVP2 protein and (ii) a nucleotide sequence comprising an the open reading frame encoding an corresponding to the IBDV VP3 protein.
3. (currently amended) A vector gene construct comprising the a nucleic acid according to claim 2.
4. (currently amended) An expression system comprising selected from:
  - a) an expression system comprising (i) a first polynucleotide sequence gene construct comprising an the open reading frame encoding an corresponding to the IBDV pVP2 protein, operatively bound to transcription, and optionally translation, control elements, and (ii) a second polynucleotide sequence gene construct comprising an the open reading frame encoding an corresponding to the IBDV VP3 protein, operatively bound to transcription, and optionally translation, control elements; and
  - b) an expression system comprising a gene construct according to claim 3, operatively bound to transcription, and optionally translation, control elements, wherein the first and second polynucleotide sequences are operatively bound to at least one transcription control element.
5. (currently amended) An expression system according to claim 4, wherein said expression system comprises one or more being selected from plasmids, bacmids, yeast artificial chromosomes (YACs), bacteria artificial chromosomes (BACs), bacteriophage P1-based artificial chromosomes (PACs), cosmids, and/or viruses, which, optionally, contain a heterologous replication origin.
6. (currently amended) A host cell comprising one or more nucleic acids, which one or more nucleic acids comprise (i) a nucleotide sequence comprising an open reading frame encoding an IBDV pVP2 protein and (ii) a nucleotide sequence comprising an open reading frame encoding an IBDV VP3 protein containing a nucleic acid according to claim 2, or a gene construct according to claim 3, or an expression system according to anyone of claims 4 or 5.

7. (currently amended) The host cell of claim 6, wherein the A-host cell that is transformed, transfected or infected with an expression system comprising the one or more nucleic acids according to anyone of claims 4 or 5.

8. (currently amended) The [[H]]host cell according to anyone of claims 6 or 7, wherein the host said cell being is an insect cell or a yeast cell.

9. (currently amended) A method for process for the production of producing the empty capsid[[s]] of the infectious bursal disease virus (IBDV), VLPs( VP4), according to claim 1, comprising culturing a host cell comprising one or more nucleic acids, which one or more nucleic acids comprise (i) a nucleotide sequence comprising an open reading frame encoding an IBDV pVP2 protein and (ii) a nucleotide sequence comprising an open reading frame encoding an IBDV VP3 protein according to anyone of claims 6 to 8, and if so desired, recovering said empty IBDV capsids.

10. (currently amended) The method Process according to claim 9, comprising: wherein said host cell is an insect cell, comprising the steps of:

a) preparing an expression system selected from:

an expression system constituted by a recombinant baculovirus containing a gene construct according to claim 3, operatively bound to transcription, and optionally translation control elements; and

an expression system constituted by (i) a recombinant baculovirus containing a gene construct comprising the open reading frame corresponding to the IBDV pVP2 protein, and (ii) a recombinant baculovirus containing a gene construct comprising the open reading frame corresponding to the IBDV VP3 protein;

a[[b]]) infection infecting insect cells with one or more recombinant baculoviruses, which one or more recombinant baculovirus comprise (i) a nucleotide sequence comprising an open reading frame encoding an IBDV pVP2 protein and (ii) a nucleotide sequence comprising an open reading frame encoding an IBDV VP3 protein said expression system prepared in step a); and

b[[c]]) culturing the infected insect cells obtained in step a[[b]]) under conditions allowing the expression of recombinant proteins and their assembly into forming empty IBDV capsids, VLPs( VP4); and

e) ~~if so desired, isolating and optionally purifying said IBDV empty capsids, VLPs( VP4).~~

11. (currently amended) The method Process according to claim 9, comprising: wherein said host cell is a yeast, comprising the steps of:

a) ~~preparing an expression system constituted by a plasmid containing a gene construct according to claim 3;~~

a[[b]]) transforming yeast cells with one or more plasmids, which one or more plasmids comprise (i) a nucleotide sequence comprising an open reading frame encoding an IBDV pVP2 protein and (ii) a nucleotide sequence comprising an open reading frame encoding an IBDV VP3 protein ~~said expression system prepared in step a)~~; and

b[[c]]) culturing the transformed yeast[[s]] cells obtained in step b) under conditions allowing the expression of recombinant proteins and their assembly into to form empty IBDV capsids, ~~VLPs( VP4)~~; and

d) ~~if so desired, isolating and optionally purifying the empty IBDV capsids, VLPs( VP4).~~

12. (canceled)

13. (currently amended) A pharmaceutical composition comprising an ~~The use of~~ empty capsid[[s]] of the infectious bursal disease virus (IBDV), ~~VLPs( VP4)~~ according to claim 1 ~~in the manufacture of a medicament.~~

14. (currently amended) The pharmaceutical composition Use according to claim 13, wherein said pharmaceutical composition ~~medicament~~ is a vaccine against ~~the avian disease called~~ infectious bursal disease.

15. (currently amended) The pharmaceutical composition Use according to claim 13, wherein said pharmaceutical composition ~~medicament~~ is a gene therapy vector.

16. (currently amended) A vaccine comprising a therapeutically effective amount of the empty IBDV capsids, ~~VLPs( VP4)~~, according to claim 1, ~~optionally together with one or more and a pharmaceutically acceptable adjuvants and/or vehicles.~~

17. (currently amended) The v[[V]]accine according to claim 16, wherein the vaccine is capable of eliciting an immune response capable of protecting to protect birds from an the infection caused by the infectious bursal disease virus (IBDV).

18. (currently amended) The v[[V]]accine according to claim 17, wherein said birds are selected from the group consisting of formed by chickens, turkeys, geese, ganders, pheasants, quails, and ostriches.

19. (canceled)

20. (new) The expression system of claim 4, wherein the first and second polynucleotide sequences are on the same or different nucleic acids.

21. (new) The expression system of claim 5, wherein the expression system further comprises a heterologous replication origin.

22. (new) The method according to claim 9, further comprising recovering said empty capsid.

23. (new) The method according to claim 10, further comprising recovering said empty capsids.

24. (new) The method according to claim 11, further comprising recovering said empty capsids.

25. (new) The vaccine according to claim 16, further comprising at least one pharmaceutically acceptable vehicle and/or adjuvant.